

WHAT IS CLAIMED IS:

1. An image output system in which a first output  
apparatus for outputting a monochromatic image, a  
second output apparatus for outputting a color image,  
5 and a controller for controlling image outputs of said  
output apparatuses are connected,

wherein the controller comprises:

reception means for receiving a print job;

first control means for controlling image outputs  
10 by distributing monochromatic pages to the first output  
apparatus and color pages to the second output  
apparatus where the monochromatic pages and color pages  
are mixed in the print job received by the reception  
means; and

15 second control means for controlling image outputs  
by switching an output mode of the second output  
apparatus to a monochromatic image output mode when the  
image output of the color pages from the second output  
apparatus has been completed by the control of the  
20 first control means, and distributing non-output  
monochromatic pages to the second output apparatus  
switched to the monochromatic image output mode and to  
the first output apparatus.

2. An image output system according to claim 1,  
25 wherein, when both pages for double-side printing or  
a plurality of pages are to be output onto one paper  
sheet, the first control means and the second control

means distribute these pages in a non-division manner.

3. An image output system in which a controller that is connected to a plurality of output apparatuses including an output apparatus for outputting a  
5 monochromatic image and an output apparatus for outputting a color image and controls image outputs thereof is connected to a personal computer via a communication line,

wherein the controller comprises:

10 reception means for receiving a print job from the personal computer via the communication line;

first control means for controlling image outputs by distributing monochromatic pages to one or more of the output apparatuses for outputting monochromatic  
15 images and color pages to one or more of the output apparatuses for outputting color images where the monochromatic pages and color pages are mixed in the print job received by the reception means; and

second control means for controlling image outputs  
20 by switching an output mode of said one or more output apparatuses for outputting color images to a monochromatic image output mode when the image output of the color pages has been completed by the control of the first control means, and distributing remaining  
25 monochromatic pages to said one or more output apparatuses switched to the monochromatic image output mode and to said one or more output apparatuses for

outputting monochromatic images in accordance with output speeds of the output apparatuses.

4. An image output system according to claim 3, wherein when a previous print job is being output by  
5 any one of said plurality of output apparatuses, the first control means and the second control means distribute all non-output pages to output-capable output apparatuses alone, excluding said output apparatus outputting the previous print job.

10 5. An image output system according to claim 3, wherein when a jam or an interrupt has occurred during the output of the print job, the first control means and the second control means redistribute all non-output pages to output-capable output apparatuses  
15 alone.

6. An image output system according to claim 3, wherein when a jam or an interrupt has been eliminated during the output of the print job, the first control means and the second control means redistribute all  
20 non-output pages to output-capable output apparatuses in accordance with output speeds of the output apparatuses.

7. An image output system according to claim 3, wherein when the print job has been completed, the  
25 controller causes the personal computer to display a print result in which the number of pages and output destinations are associated.

8. An image output system according to claim 3,  
wherein when the print job has been completed, the  
controller causes one of said plurality of output  
apparatuses to output a print result in which the  
5 number of pages and output destinations are associated.

9. An image output system according to claim 3,  
wherein the controller calculates an estimate required  
time for the print job when the output-capable output  
apparatus is used, and causes the personal computer to  
10 display the estimate required time.

10. An image output system according to claim 3,  
wherein the personal computer selects one of the plural  
output apparatuses which is to perform the print job.

11. An image output method for outputting images  
15 using a plurality of image forming apparatuses  
connected to a network, the method comprising:

a step of instructing output of plural images;  
a first distribution step of distributing images  
to be output to said plural image forming apparatuses  
20 in accordance with contents of the plural images the  
output of which has been instructed; and

a second distribution step of redistributing  
non-output images to said a plurality of image forming  
apparatus, where any one of the plural image forming  
25 apparatuses has completed the output of the images  
distributed in the distribution step and there are the  
non-output images in the images distributed to the

other image forming apparatuses in the distribution step.

12. An image output method according to claim 11,  
wherein in the first distribution step the distribution  
5 is effected by determining whether the contents of  
the plural images relate to color originals or  
monochromatic originals.

13. An image output method according to claim 11,  
wherein in the second distribution step the  
10 distribution of images is effected in accordance  
with image output speeds of the plural image forming  
apparatuses.

14. An image output method according to claim 11,  
wherein said plurality of image forming apparatuses  
15 include at least one first image forming apparatus  
capable of outputting monochromatic images alone, and  
at least one second image forming apparatus capable of  
outputting monochromatic images and color images.

15. An image output method according to claim 11,  
20 wherein in the first distribution step, originals are  
distributed such that a first image forming apparatus  
outputs monochromatic originals and a second image  
forming apparatus outputs color originals, and in the  
second distribution step, originals are distributed  
25 such that the first and second image forming  
apparatuses output monochromatic images.

16. An image output method according to claim 11,

wherein when any one of the plural image forming apparatuses is outputting images, images to be output are distributed to the output-capable image forming apparatuses alone, excluding this image forming apparatus outputting images.

17. An image output method according to claim 11, wherein when a jam or an interrupt has occurred while images are being output from any one of the plural image forming apparatuses to which images to be output have been distributed, images to be output are redistributed to the output-capable image forming apparatuses alone.

18. An image output method according to claim 11, wherein when a jam or an interrupt has occurred while images are being output from any one of the plural image forming apparatuses to which images to be output have been distributed, images to be output are redistributed to the output-capable image forming apparatuses in accordance with output speeds of the image forming apparatuses.

19. An image output method according to claim 11, wherein when the output of the plural images, the output of which was instructed, has been completed, an output result is output from one of the plural image forming apparatuses.

20. An image output method according to claim 11, wherein when the output of the plural images, the

output of which was instructed, has been completed, an  
output result is displayed.